

**REPORT TO REGIONAL WATER SUPPLY COMMISSION  
MEETING OF WEDNESDAY, NOVEMBER 20, 2013**

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**SUBJECT      GREATER VICTORIA WATER SUPPLY AREA SECURITY**

**ISSUE**

Review the security program for the Greater Victoria Water Supply Area and consider alternatives for further protection of the Leech Water Supply Area.

**BACKGROUND**

Security of the Greater Victoria Water Supply Area (GVWSA) has been evolving since water supply lands were incorporated into the Greater Victoria Water District in 1922. Over time, access and activities have been increasingly restricted (e.g. hunting, fishing) and security pressures have changed (e.g. the closure of Highway 117 along Sooke Lake Reservoir in 1997). The sole purpose of restricting access and activities is to protect Greater Victoria's drinking water supply. However, the more recently acquired Leech Water Supply Area (Leech WSA) has not yet been fully integrated into the GVWSA security program and is the focus of this report (Map 1).

**Overview of Security in the Greater Victoria Water Supply Area**

The current security program for the Greater Victoria Water Supply Area includes the following elements:

*Authority*

The Greater Victoria Water Supply Area Protection Bylaw No. 2804 (GVWSA Protection Bylaw) currently applies only to the Sooke and Goldstream Water Supply Areas and prohibits and provides for enforcement of:

- Unauthorized entry
- No dumping, damage to the environment or wildlife, damage to infrastructure
- Unauthorized fire, tree cutting, fuel storage
- Unauthorized aircraft landing on reservoirs or within the WSAs
- No hunting or fishing and no discharge of firearms, bows or crossbows

*Barriers to Entry*

- Heavy duty gates (36) and locks with key control at road access points into the GVWSA
- Boundary fencing (11.5 km or 1% of boundary) of areas intersecting with public access (e.g. Cougar Ridge neighbourhood) and at areas of trespass occurrences (e.g. adjacent to access gates)
- Goldstream entrance security gate staffed and operated during working hours

*Security Monitoring*

- Oversight of all entry/exit at the Goldstream gate during working hours
- Tracked entry and exit by access authorization permit for CRD and non-CRD entrants (e.g. contractors, researchers)
- Ground patrols conducted on access routes throughout the year and air patrols conducted during high and extreme fire hazard (typically June – Sept.)
- Boundary inspections conducted by ground and air

- Video surveillance at critical infrastructure points with automatic alarming (under development)
- Cooperation with neighbouring property owners on security (e.g. Kapoor Lumber, TimberWest)
- Active member of the Southern Vancouver Island Forest Crimes Prevention Organization which includes private forest companies, the RCMP, the Ministry of Forests, Lands and Natural Resource Operations, First Nations, Wilderness Watch

#### *Compliance and Enforcement*

- Watershed orientations for all entrants to provide information on operating procedures for working in the GVWSA
- No Trespassing signs on gates, fences and along property boundaries
- Investigation of all security incidents with recommendations and follow-up measures
- Worksite supervision and inspection for non-CRD activities
- Educational information provided to all unauthorized entrants found
- Warnings and bylaw tickets levied with assistance from CRD Bylaw Officers
- Provincial Wildlife Conservation Officer participation in ground patrols during hunting season

#### **Overview of Security in the Leech Water Supply Area**

The Leech Water Supply Area (WSA) was acquired through two purchases: one in 2007 and one in 2010. To date this area has not been included in the GVWSA Protection Bylaw which prohibits and allows for CRD enforcement of dumping, fires, discharge of firearms, damage to facilities or the environment, unauthorized camping and entry. Nevertheless, the CRD, as the landowner can still prohibit these activities along with the Juan de Fuca Electoral Area bylaws and provincial legislation applying in part. However, the CRD would require the assistance of the RCMP or provincial agencies for enforcement.

The 2009 assessment of the Leech WSA recommended a closed watershed policy for the Leech primarily to reduce the high risk of a major wildfire which could significantly impact the Sooke WSA. Given access and resource limitations, the *2012 Strategic Plan for the Greater Victoria Water Supply System* recommended a phased approach to a closed watershed policy in the Leech. Since purchase, public access has been increasingly restricted, initially from the south closest to critical infrastructure and more recently at Jarvis Lake in the east closest to the Sooke WSA (Map 2). Jarvis Lake was closed in summer 2012 by posting and handing out notices in advance, removing a dilapidated cabin, conducting patrols and requiring entrants to leave. The closure resulted in few subsequent incidents, in large part due to increased access restrictions by the surrounding private timber company.

It is important to note that any access to the Leech WSA first requires a trespass over surrounding private lands (Map 2). The neighbouring private timber companies do not allow public access and use gates and other barriers to close their lands, particularly during fire season. The following photo shows signage on the only access route to Weeks Lake through TimberWest property. This access route has two gates which are kept open or closed depending on TimberWest's operational needs.



The partial and informal closure of the Leech WSA has allowed the continuation of undesirable public activities particularly in the Weeks Lake area. Activities include damage to a fish bearing stream by vehicles accessing Weeks Lake, stolen vehicles driven into Weeks Lake (twice), tree cutting, dumping and burning in a gravel pit (including large items such as televisions, computers, a camper and canoe), littering and sanitation concerns, discharge of firearms, abandoned campfires, the release of fireworks during high and extreme fire hazard and rutting and erosion from off-road motorbikes and all-terrain vehicles into a wide area of the Leech WSA.

As shown in Figure 1, the number of times the public has accessed the Leech WSA has varied without showing a clear trend, despite patrol outreach efforts. The lower numbers in 2008 and 2009 were the result of fewer patrols and poor access, and 2013 data is not yet complete. The type of unauthorized activity is predominantly off-road vehicle use (Figure 2), and the greatest area of use is in the vicinity of Weeks Lake (Figure 3). It should be noted that the figures only depict the detected/confirmed occurrences and actual visits may be much higher or occur over a much wider area than recorded. Ground patrols attend the Weeks Lake area each weekend when activities are most frequent and daily during high and extreme fire hazard.

**Figure 1: Observed unauthorized access in the Leech Water Supply Area by year.**

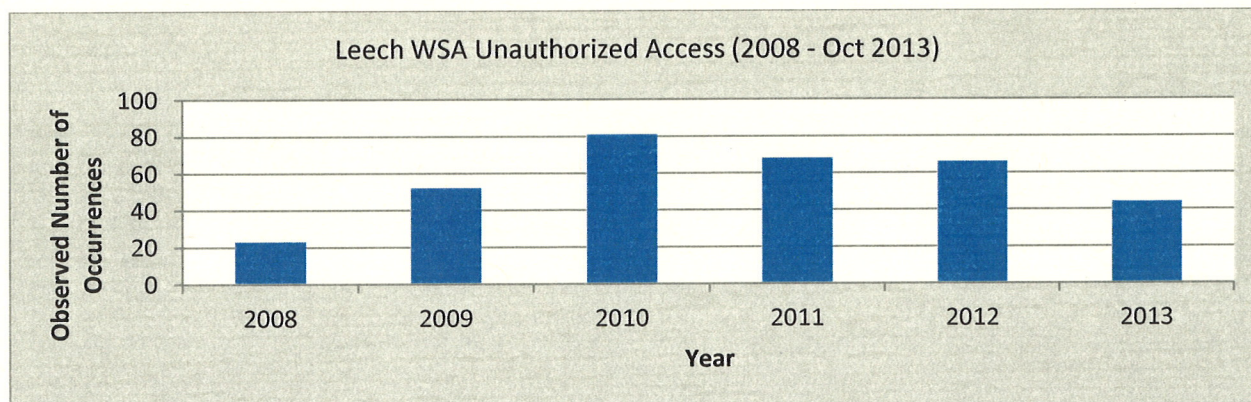




Figure 2: Observed types of unauthorized access in the Leech Water Supply Area.

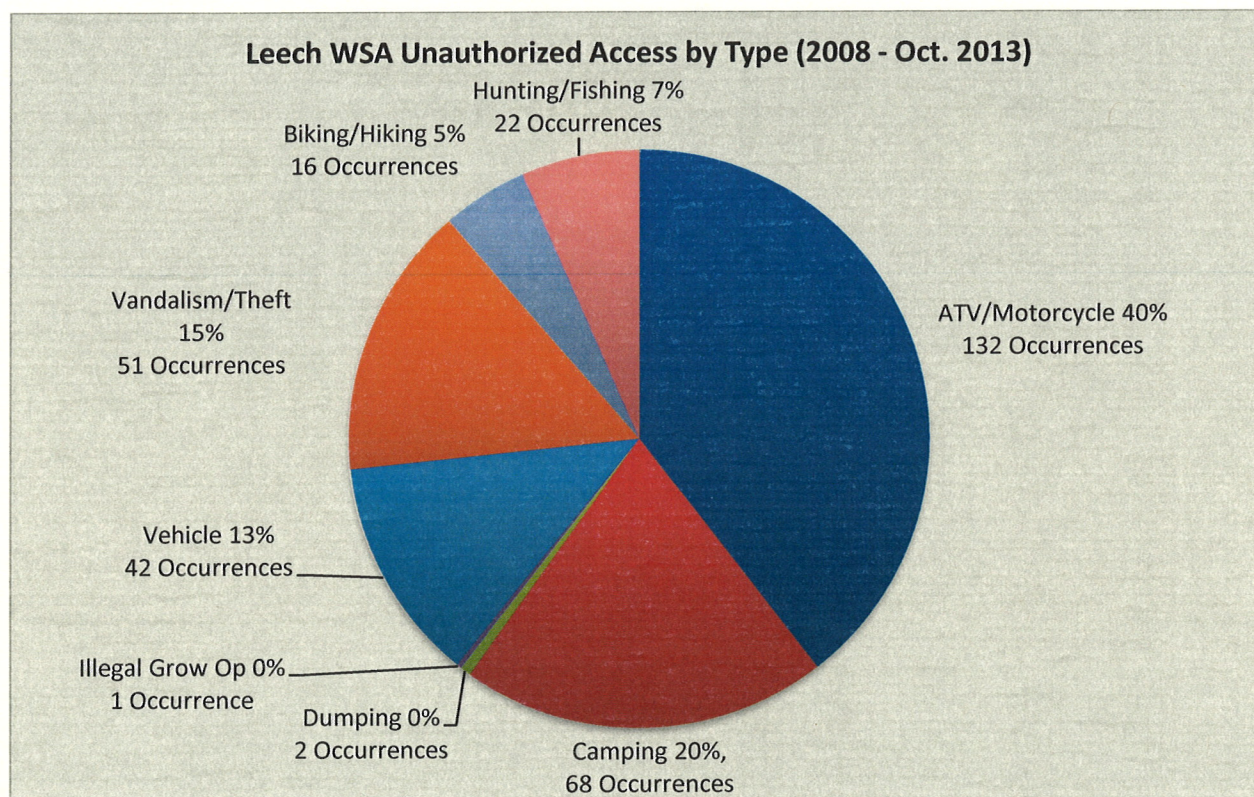
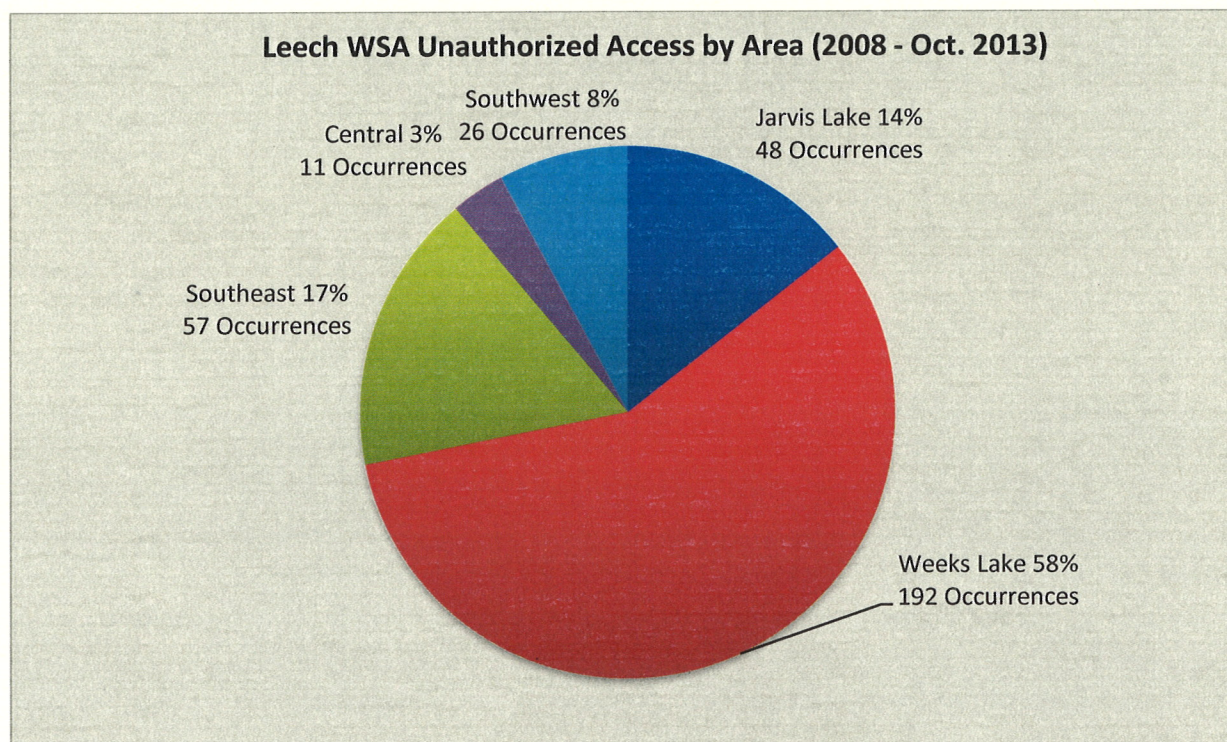


Figure 3: Observed areas of unauthorized access in the Leech Water Supply Area.





### Proposed Security for the Leech Water Supply Area

It is proposed to fully integrate the Leech WSA into the GVWSA security program, effective January 1, 2015. The two main elements lacking from the current Leech security program are:

- 1) Incorporation of the Leech WSA into the GVWSA Protection Bylaw, and
- 2) Full closure of the Leech WSA to public access.

The benefits of fully integrating the Leech WSA in the GVWSA security program include:

- Reduced risk of wildfire, environmental damage, spread of invasive species
- Improved compliance due to the ability to enforce water supply area protection
- Consistent approach to water supply area protection with the public
- Consistent security approach with surrounding landowners

Incorporation of the Leech into the GVWSA Protection Bylaw requires approval of an amendment to the bylaw by the CRD Board. Full closure of the Leech to public access includes the elements and recommended timing listed in the table below:

**Table 1: Elements to Fully Close the Leech to Public Access**

Element	Detail	Operating and Capital Cost	Funding Source	Proposed Timing
Infrastructure	Signs: boundary marking, informational signs, gate and property signs	\$6,000	Existing capital funds	Spring 2014
Communication	Communicate closure timing and seek cooperation with neighbouring private timber companies	\$0	n/a	Spring 2014
Communication	Create pamphlet explaining complete closure in 2015 – for posting at external gates and for handout	\$2,000	Operating funds	Summer 2014
Communication	Public communication – notices and articles to web and print media regarding restoration efforts, significance of protection and communicating closure plan	\$2,000	Operating funds	Summer 2014
Patrols/ Enforcement	Dedicate one patrol to Leech WSA on weekends, and weekdays during high and extreme fire danger	\$0	Re-focus of existing patrols (approx. \$62,000 value annually from operating)	April – Nov 2014 April – Nov 2015 TBD 2016
Infrastructure	Additional bracing/supports for existing fences	\$10,000	Existing capital funds	Fall 2014
Infrastructure	Tender and construction of one boundary gate and 250 m of perimeter fencing	\$60,000	Existing capital funds	Fall 2014
Patrols/ Enforcement	Add CRD Bylaw staff to Leech WSA patrols on busy summer weekends	\$4,000	Operating funds	Summer 2015, Summer 2016
Patrols/ Enforcement	Conservation officer patrols during hunting season	\$0	Agency cooperation	Fall 2014, 2015
<b>Total Budget</b>		<b>\$84,000</b>		

## **ALTERNATIVES**

That the Regional Water Supply Commission:

1. Direct staff to prepare an amendment to the Greater Victoria Water Supply Area Protection Bylaw No. 2804 to include the Leech Water Supply Area, with the intention that the Leech Water Supply Area be fully closed to public access effective January 1, 2015,
2. Not approve inclusion of the Leech Water Supply Area in the Greater Victoria Water Supply Area Protection Bylaw No. 2804, and not approve full closure to public access of the Leech Water Supply Area.

## **IMPLICATIONS**

### **Social Implications**

There has been a history of public use of the Leech WSA for recreational activities while under private timber company ownership. However, this previous use has been without the permission of the timber companies and poses risks to the GVWSA. Those individuals and groups that pursue these activities will view any further restrictions on access negatively. Increased control of activities to reduce littering, dumping, sanitation concerns and discharge of firearms may however be seen positively by these users and certainly by the general public. Continuing to allow public access may make eventual closure more difficult and costly.

Since the Leech WSA is not expected to be used as a drinking water supply area for several decades, the area could sustain camping and recreational activities without damaging future water supply if conducted with strict rules to protect water quality and the natural environment. However, there is no public access through private timber company lands to reach the Leech WSA, so the CRD cannot support these uses. The surrounding landowners are currently increasing efforts to enforce no trespassing on their lands due to the rising costs of vandalism and fire suppression (example Shawnigan Lake 2012 fire). In addition, CRD Integrated Water Services does not have a mandate or the resources to provide and manage recreational opportunities in the Leech WSA; these activities are not permitted in the Sooke and Goldstream Water Supply Areas.

Uncontrolled trespass activities in the Leech WSA expose the CRD and the Greater Victoria drinking water supply to risk. If a serious incident or injury occurred as a result of a public activity which staff had knowledge was occurring, but did not attempt to warn or prevent the public from doing, the CRD may be found negligent or liable for the incident. Most importantly, the uncontrolled activities could lead to a wildfire that spreads to the adjacent Sooke WSA posing a direct risk to drinking water quality and supply.

The litter, dumping and damage caused by off road vehicles in sensitive areas in the Leech WSA would also likely be considered as poor stewardship of a future drinking water supply area by the general public. The expectation is that the CRD provides a high level of environmental stewardship, in particular for water supply lands.

There are approximately 80 mineral and placer tenures in or intersecting with the Leech WSA. Until the Leech WSA is reserved from mining claims similar to the Sooke and Goldstream WSAs, the CRD is required to allow access to these tenures under the Mineral Tenures Act and the Mining Right of Way Act. Tenure holders are handled as authorized entrants in the security program which requires their application for access, vehicle identification, orientation, operational restrictions based on fire hazard and carrying of fire preparedness tools.

First Nations have expressed interest in access to the Leech WSA. A cultural use assessment is planned to further understand past and potential future use. A closed watershed policy for the Leech WSA does not preclude future agreement with First Nations for specified access.



### Environmental Implications

There are environmental implications for continuing to allow uncontrolled access to the Weeks Lake area of the Leech WSA. The most serious consequence would be widespread wildfire from campfires, vehicles, motorized equipment, shooting or fireworks. There are also concern about spills and contamination from dumping and off road vehicles, and the spread of invasive plants and animals that are brought in with traffic and through dumping. Off road vehicles also create long lasting environmental damage when used in sensitive areas.

### Economic Implications

Closure of the Leech WSA in its entirety will require approximately \$84,000 for additional infrastructure, signs and communication. In addition, replacement/repair of vandalized infrastructure and signs will undoubtedly be needed to maintain closure. Funding for closure is expected to be fully accommodated through existing capital and operating funding. Additional patrol effort to enforce the closure is expected to be handled predominantly through re-allocation of patrols with a modest increase in cost to incorporate CRD Bylaw officer assistance as needed. Longer term, a decrease in repairs to security infrastructure including signage is expected.

### Growth Management Implications

Alternative 1 meets the intent of the Juan de Fuca Electoral Area Official Community Plan (OCP) for Rural Resource Lands which cover the Leech WSA. The following sections of the plan (Section 3.5.1 Water Supply Area Designation Policies) apply:

*Activities permitted in the Water Supply Area designation relate directly to the protection and management of water supply lands, facilities and infrastructure for water quality and supply and the protection and management of compatible secondary values such as biodiversity, fish habitat, and historic/cultural sites;*

*There is no unauthorized access to the Water Supply Area lands to ensure protection of the drinking water supply for most of the residents of Greater Victoria;*


The Leech WSA lands purchased in 2010 (Weeks Lake area) have not yet been included in the Juan de Fuca OCP as Water Supply Area, but are planned to be amended in.

### CONCLUSION


The Leech Water Supply Area can be further protected by fully closing the area to public access and amending the Greater Victoria Water Supply Area Protection Bylaw No. 2804 to allow for enforcement of the closure and unauthorized activities.

### RECOMMENDATION(S)

That the Regional Water Supply Commission direct staff to prepare an amendment to the Greater Victoria Water Supply Area Protection Bylaw No. 2804 to include the Leech Water Supply Area, with the intention that the Leech Water Supply Area be fully closed to public access effective January 1, 2015,

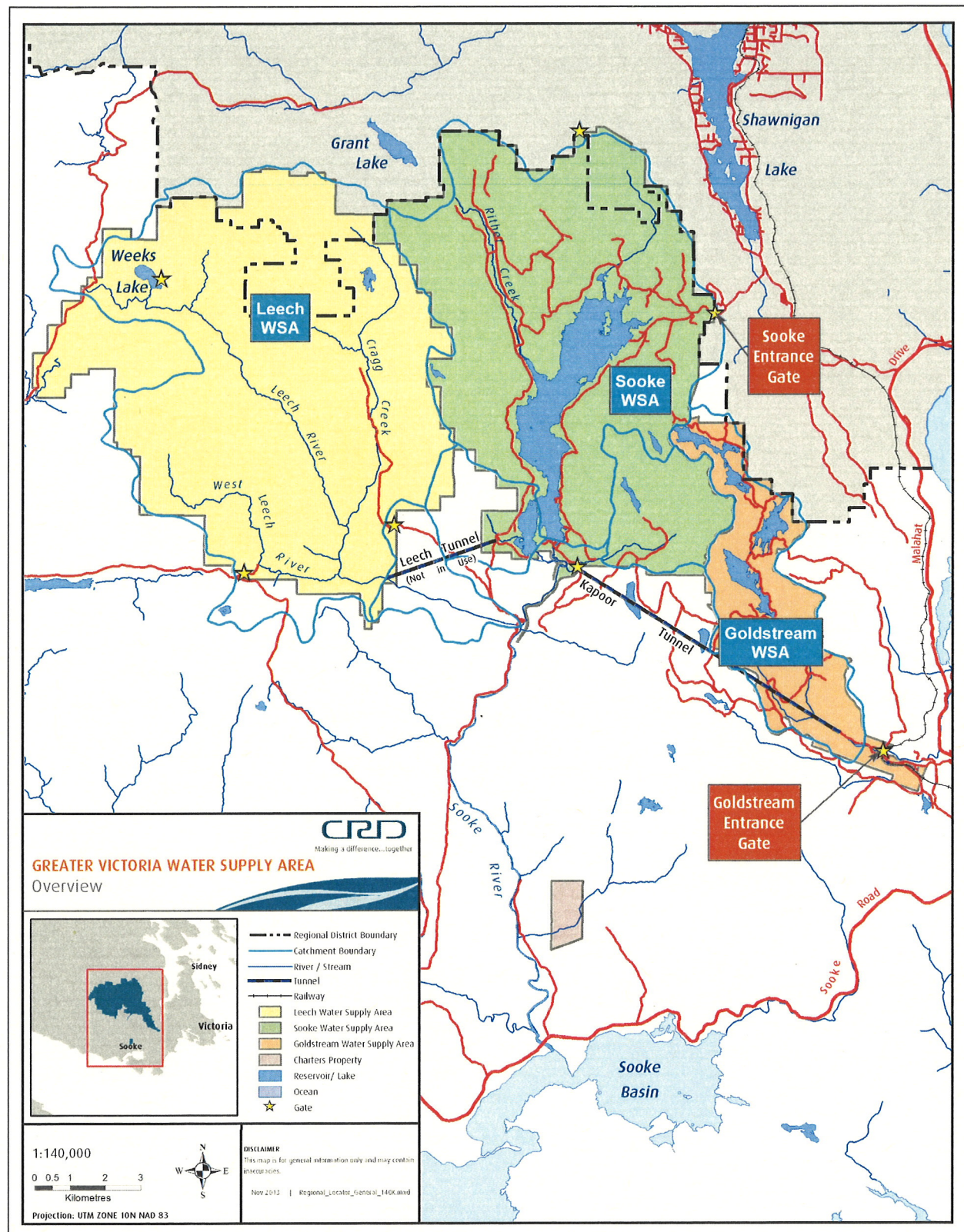
  
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AC/TR:mm  
Attachments: Map 1, Map 2

  
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Concurrence



Map 1: Sooke, Goldstream and Leech Water Supply Areas





Map 2: Leech WSA Main Access Routes, Gates and Adjacent Landowners

